PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION International Bureau



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

- (51) International Patent Classification 7: (11) International Publication Number: WO 00/04187 C12Q 1/68 A2 (43) International Publication Date: 27 January 2000 (27.01.00)
- (21) International Application Number: PCT/US99/15829
- (22) International Filing Date: 14 July 1999 (14.07.99)
- 09/114,825 14 July 1998 (14.07.98) US
- (71) Applicant: THE JOHNS HOPKINS UNIVERSITY [US/US]; 3400 North Charles Street, Baltimore, MD 21218 (US).
- (72) Inventor: FEINBERG, Andrew, P.; 15 Westspring, Lutherville, MD 21093 (US).
- (74) Agents: SHOPE, Suzanne, Seavello et al.; Jones & Askew, LLP, 2400 Monarch Tower, 3424 Peachtree Road, Atlanta, GA 30326 (US).
- (81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published

Without international search report and to be republished upon receipt of that report.

(54) Title: METHODS AND KITS FOR DIAGNOSING AND DETERMINATION OF THE PREDISPOSITION OF DISEASES

(57) Abstract

(30) Priority Data:

The present invention provides a method and a kit for the purpose of diagnosing a disease or determining the predisposition for a disease by measuring abnormalities in imprinting of a gene or population of genes. The disease that can be diagnosed by the present invention is selected from any disease that is mediated by, or is associated with, a particular gene or combination of genes that are subject to imprinting. According to the present invention, the imprinting can be abnormally on or can be abnormally off. In those cases where the particular gene that is being examined is normally imprinted, but in the disease state is abnormally not imprinted, the present invention is designed to detect the "loss of imprinting" (hereinafter "LOI") thereby indicating that the disease may be present.

